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The chemical structure shows a central imidazolidinone ring, which is a five-membered ring containing one nitrogen atom and a carbonyl group. This central ring is connected at its 1 and 3 positions to two 4-pyridyl groups. Each 4-pyridyl group consists of a benzene ring with a pyridine ring attached at the para position. The overall structure is symmetrical and represents a macrocyclic ligand used in the synthesis of the copper(II) complex described in the text.




















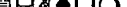

















































































































































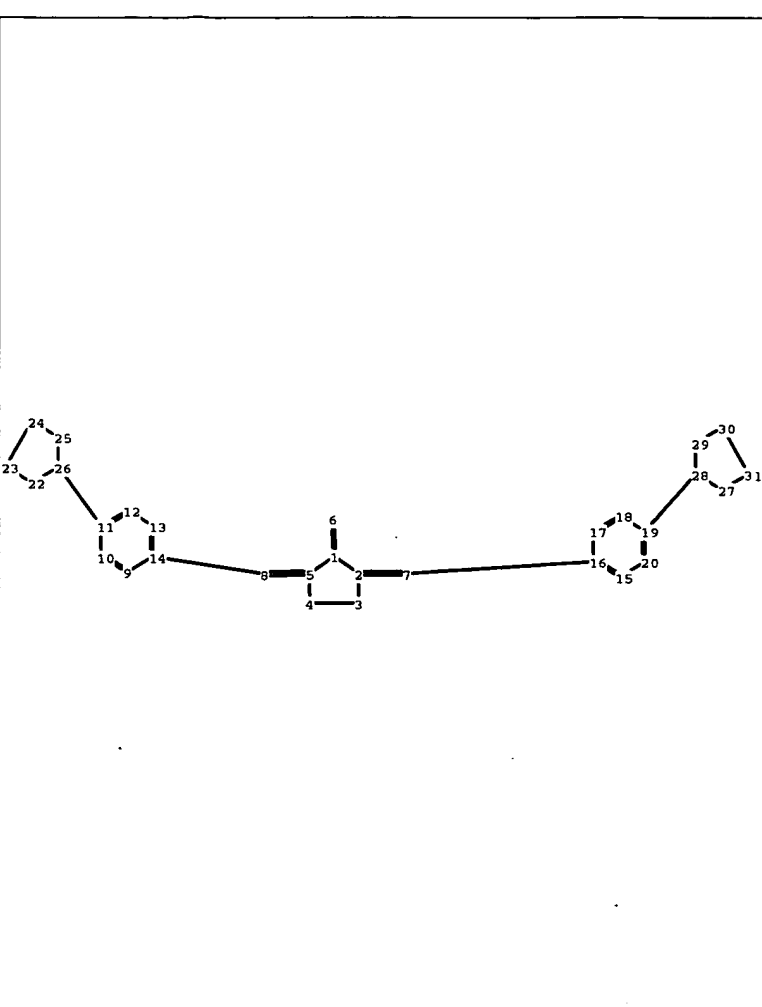









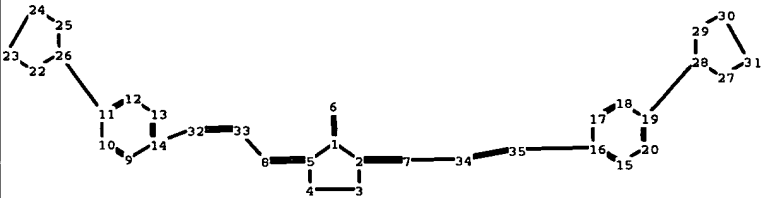









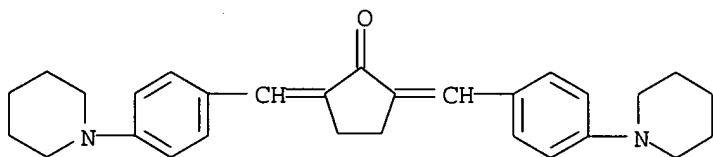
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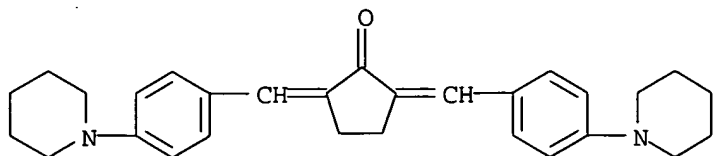
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[illegible]

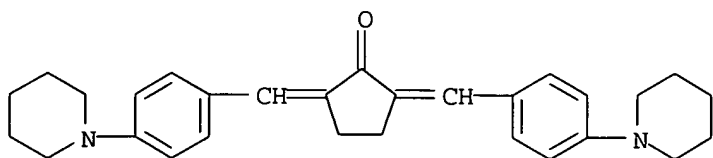
L11 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2003:86693 CAPLUS
 DN 140:61032
 TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper. [Erratum to documents cited in CA137:312346, CAS140:43519]
 AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni
 CS Cellulose and Paper Department, National Research Centre, Cairo, 12622, Egypt
 SO Dyes and Pigments (2003), 56(3), 261
 CODEN: DYPIDX; ISSN: 0143-7208
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB The correct footnote to Table 1 on page 8 should, in fact, read as follows: ".vphi.s: quantum yield of the tested compound, .vphi.r; quantum yield of the reference standard (quinine sulfate)".
 IT **125407-22-9P**
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper (Erratum))
 RN 125407-22-9 CAPLUS
 CN Cyclopentanone, 2,5-bis[[4-(1-piperidiny]phenyl]methylene]- (9CI) (CA INDEX NAME)



L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:943679 CAPLUS
 DN 140:43519
 TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper. [Erratum to document cited in CA137:312346]
 AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni
 CS Cellulose and Paper Department, National Research Centre, Cairo, 12622, Egypt
 SO Dyes and Pigments (2003), 56(1), 89
 CODEN: DYPIDX; ISSN: 0143-7208
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB In Table 1, the first footnote should read as follows: "Φs: quantum yield of the tested compound, Φr: quantum yield of the reference standard (quinine sulfate)".
 IT **125407-22-9P**
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper (Erratum))
 RN 125407-22-9 CAPLUS
 CN Cyclopentanone, 2,5-bis[[4-(1-piperidiny]phenyl]methylene]- (9CI) (CA INDEX NAME)



L11 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:532398 CAPLUS
 DN 137:312346
 TI Fluorescence behavior of new 3-pyridinecarbonitrile containing compounds and their application in security paper
 AU Basta, Altaf H.; Girgis, Adel S.; El-Saied, Houssni
 CS Cellulose & Paper Department, National Research Centre, Cairo, 12622, Egypt
 SO Dyes and Pigments (2002), 54(1), 1-10
 CODEN: DYPIDX; ISSN: 0143-7208
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 137:312346
 AB The fluorescence properties of newly synthesized 3-pyridinecarbonitrile-containing compds. were determined The application of such compds. for preparation special type of paper was investigated by studying the fluorescence behavior and mech. properties of treated paper sheets prepared from bagasse pulp.
 IT **125407-22-9P**
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (yellow fluorescent dye; preparation and fluorescence of cycloalkanone derivs. and their application in security paper)
 RN 125407-22-9 CAPLUS
 CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)



RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1990:100740 CAPLUS
 DN 112:100740
 TI Photopolymerization initiator and thermal-transfer recording medium
 IN Okuma, Norio
 PA Canon K. K., Japan; Sanyo Chemical Industries Ltd.
 SO Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1
 PATENT NO. KIND DATE APPLICATION NO. DATE

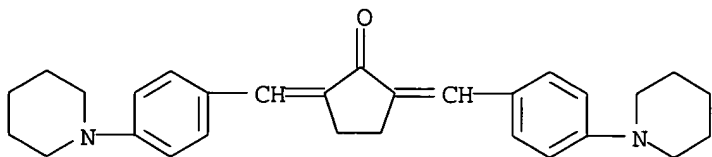
PI	JP 01174503	A2	19890711	JP 1987-335732	19871228
PRAI	JP 1987-335732		19871228		

AB The title photopolymn. initiator is composed of α -diketone derivative, and I or II [Ar1, Ar2 aromatic ring, heterocyclic ring; R1 = H, C1-10 alkyl, alkenyl, alkoxy, or alkylthio, C6-12 aryl, aryloxy, or heterocyclic ring with number of C and non-C atoms to be 5-15; X = non-metallic atom for forming a ring]. The thermal-transfer recording layer is composed of the photoinitiator, and monomer, oligomer or polymer with unsatd. double bond or these mixture. An image-forming material may be encapsulated. The initiator is especially useful in one-shot color recording.

IT **125407-22-9**
 RL: USES (Uses)
 (photopolymn. initiator composition containing α -diketone and)

RN 125407-22-9 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-piperidinyl)phenyl]methylene]- (9CI) (CA INDEX NAME)

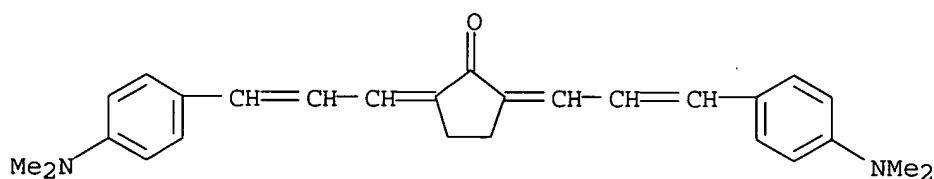


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L10 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Two-photon absorbing polymerizable compositions, their photopolymerization and applications for stereophotolithography and color filters
 AN 2005:96112 CAPLUS
 DN 142:186505
 TI Two-photon absorbing polymerizable compositions, their photopolymerization and applications for stereophotolithography and color filters
 IN Akiba, Masaharu; Takizawa, Hiroo
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 66 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2005029725	A2	20050203	JP 2003-272369	20030709
PRAI	JP 2003-272369		20030709		

AB The compns. contain polymerizable compds., two-photon absorbing compds., polymerization initiators, and coloring agents. The compns. are polymerized by irradiation with light of wavelength longer than absorption regions of the compns. from UV to visible ray and other than absorption peaks to give colored products. The compns. are effectively photopolymd. and colored independently of concentration of the coloring agents.
 IT **52560-25-5**
 RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
 (two-photon absorbing compound; photopolymn. of two-photon absorbing polymerizable compns. for manufacture of stereophotolithog. and color filters)
 RN 52560-25-5 CAPLUS
 CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



L10 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Two-photon absorbing polymerization method and optical recording material
 AN 2004:1058981 CAPLUS
 DN 142:45982
 TI Two-photon absorbing polymerization method and optical recording material
 IN Takizawa, Hiroo
 PA Fuji Photo Film Co., Ltd., Japan
 SO U.S. Pat. Appl. Publ., 118 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004245432	A1	20041209	US 2004-849519	20040520
	JP 2004346238	A2	20041209	JP 2003-146527	20030523
	JP 2005097538	A2	20050414	JP 2004-199006	20040706
PRAI	JP 2003-146527	A	20030523		

JP 2003-312744 A 20030904

AB A two-photon absorbing polymerization method comprises a first step of irradiating light absorbable by two-photon absorption to form a latent image and a second step of exciting the latent image to cause polymerization A two-photon absorbing optical recording method comprises a first step of forming a latent image of a color-forming material by two-photon absorption, a second step of irradiating light on the latent image of a color-forming material to cause polymerization based on the linear absorption of the color-forming material, and thereby forming difference in the refractive index to perform a recording.

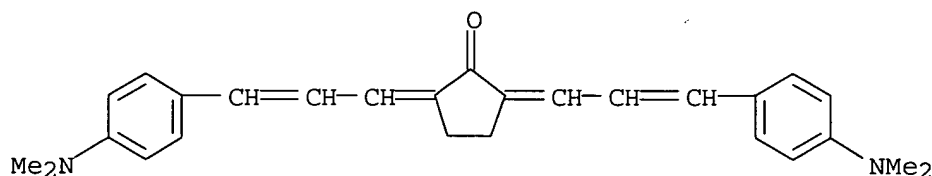
IT 52560-25-5

RL: TEM (Technical or engineered material use); USES (Uses)

and (two-photon absorbing compound; two-photon absorbing polymerization method optical recording material)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



L10 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Polymerizable compositions showing nonresonant two-photon absorption and method for three-dimensional refractive index modulation of them and optical recording therewith

AN 2004:1058477 CAPLUS

DN 142:45976

TI Polymerizable compositions showing nonresonant two-photon absorption and method for three-dimensional refractive index modulation of them and optical recording therewith

IN Takizawa, Hiroo

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 63 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004346238	A2	20041209	JP 2003-146527	20030523
	US 2004245432	A1	20041209	US 2004-849519	20040520
PRAI	JP 2003-146527	A	20030523		
	JP 2003-312744	A	20030904		

OS MARPAT 142:45976

AB The comps. comprise (A) two-photon-absorbing comps. (e.g., methine dyes, phthalocyanine dyes, merocyanine dyes, oxonol dyes), (B) (radical- or acid-generating) polymerization initiators, (C) (radically or cationically polymerizable) monomers, and (D) binders. For modulation of refractive index, the comps. are photopolymd. by two-photon absorption induced by laser irradiation at linear absorption-free wavelength which is longer than linear absorption bands of A. After the irradiation, composition ratio of C and C polymers to D in the comps. is unequalized between at focal regions and at the other regions, allowing the refractive index modulation and

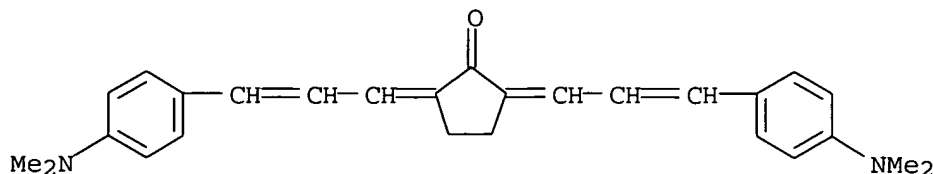
three-dimensional optical recording.

IT **52560-25-5**

RL: TEM (Technical or engineered material use); USES (Uses)
(two-photon-absorbing dyes; polymerizable compns. showing nonresonant two-photon absorption for three-dimensional refractive index modulation and optical recording)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



L10 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Preparation of cyclopentanones showing light absorption in a wide wavelength range

AN 2004:993104 CAPLUS

DN 141:410640

TI Preparation of cyclopentanones showing light absorption in a wide wavelength range

IN Ihara, Junichiro; Takahashi, Yoshiharu; Kawada, Toshio

PA Hayashibara Biochemical Laboratories, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004323394	A2	20041118	JP 2003-118089	20030423
PRAI	JP 2003-118089		20030423		

OS CASREACT 141:410640; MARPAT 141:410640

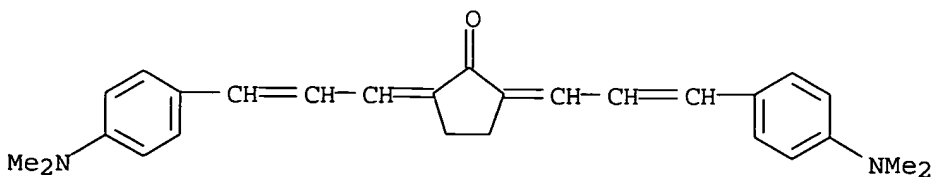
AB The cyclopentanones I or II (R9 = H, 4-R4R5NC6H3R6; R1-R8 = H, substituent), showing absorption maximum at ≥ 500 nm and half width of absorption coefficient ≥ 50 nm from the maximum, are prepared The cyclopentanones are useful as photosensitizers, light absorbers, etc. (no data). Thus, 4-Me2NC6H4CH:CHCHO was treated with cyclopentanone in the presence of NaOH to give I (R1 = R2 = Me, R3 = R9 = H) showing absorption maximum 520 nm and half width 50 nm (thin film).

IT **52560-25-5P 127371-20-4P**

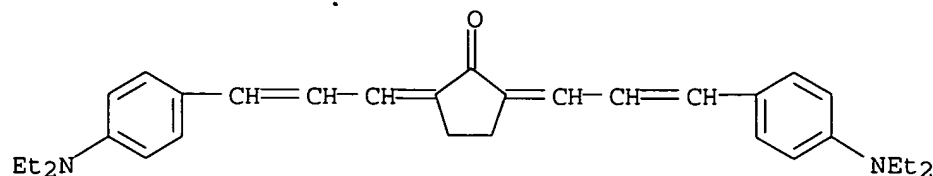
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of cyclopentanones showing light absorption in a wide wavelength range)

RN 52560-25-5 CAPLUS

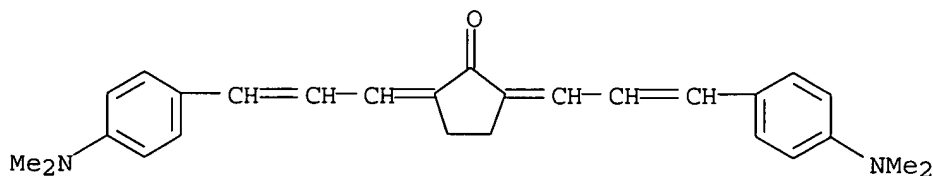
CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



RN 127371-20-4 CAPLUS
CN Cyclopentanone, 2,5-bis[3-[4-(diethylamino)phenyl]-2-propenylidene] - (9CI)
(CA INDEX NAME)



L10 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI The electronic structure and spectroscopy of diarylidene-cycloalkanones and their protonated cations
AN 2004:321272 CAPLUS
DN 141:224972
TI The electronic structure and spectroscopy of diarylidene-cycloalkanones and their protonated cations
AU Ucak-Astarlioglu, Mine Gunes
CS Worcester Polytechnic Institute, Worcester, MA, USA
SO (2003) 234 pp. Avail.: UMI, Order No. DA3089482
From: Diss. Abstr. Int., B 2003, 64(5), 2208
DT Dissertation
LA English
AB Unavailable
IT **52560-25-5**
RL: PRP (Properties)
(ab initio and absorption spectroscopy on electronic structure of diarylidene-cycloalkanones and protonated diarylidene-cycloalkanones cations)
RN 52560-25-5 CAPLUS
CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene] - (9CI) (CA INDEX NAME)

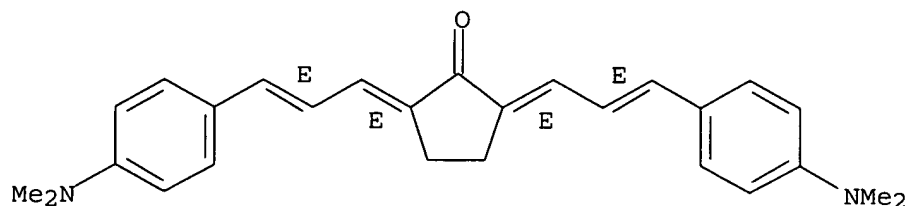


L10 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
TI Liquid crystal compositions with high order parameter for guest-host-type liquid crystal displays
AN 2004:291213 CAPLUS
DN 140:312174
TI Liquid crystal compositions with high order parameter for guest-host-type liquid crystal displays
IN Kato, Takashi; Takizawa, Hiroo; Akiba, Masaharu
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 30 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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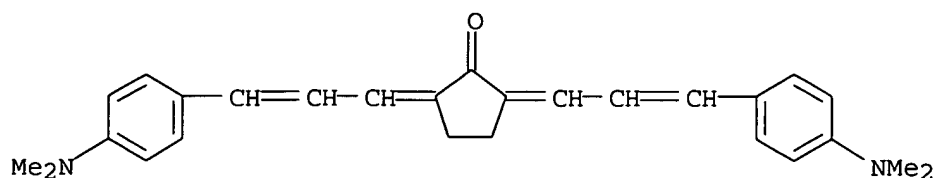
PI JP 2004107502 A2 20040408 JP 2002-272634 20020919
 PRAI JP 2002-272634 20020919
 OS MARPAT 140:312174
 AB The compns. comprise liquid crystals and nonresonant two-photon absorbing compds. as dichroic dyes. The liquid crystal displays provide high-contrast images.
 IT **677004-24-9**
 RL: DEV (Device component use); USES (Uses)
 (nonresonant two-photon absorbing compds.; liquid crystal compns. containing nonresonant two-photon absorbing compds. for high-contrast guest-host-type liquid crystal displays)
 RN 677004-24-9 CAPLUS
 CN Cyclopentanone, 2,5-bis[(2E)-3-[4-(dimethylamino)phenyl]-2-propenylidene]-, (2E,5E)-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



L10 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Compounds with efficient two-photon absorption and emission properties, and method of excitation and light emission using them
 AN 2003:508499 CAPLUS
 DN 139:92471
 TI Compounds with efficient two-photon absorption and emission properties, and method of excitation and light emission using them
 IN Akiba, Masaharu; Takizawa, Hiroo; Tani, Takeharu; Kawamata, Jun
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003183213	A2	20030703	JP 2002-251398	20020829
PRAI	JP 2001-268991	A	20010905		
OS	MARPAT 139:92471				
AB	The invention relates to the compds. X2(CR4:CR3)mCO(CR1CR2)nX1 (X1, X2 = aryl, hetero-ring group; R1-4 = H, substituent, maybe forming ring; n, m = 1-4) showing nonconjugated two-photon absorption.				
IT	52560-25-5P				
	RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (compds. with efficient nonlinear two-photon absorption and emission)				
RN	52560-25-5 CAPLUS				
CN	Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)				

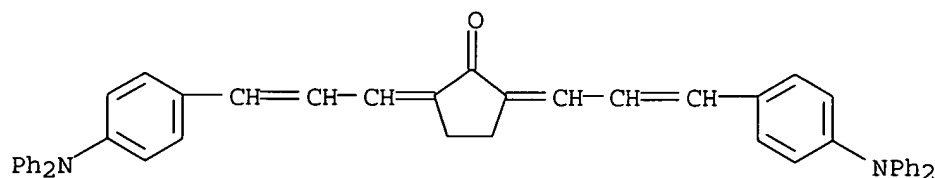


IT 553654-76-5

RL: TEM (Technical or engineered material use); USES (Uses)
(comps. with efficient nonlinear two-photon absorption and emission)

RN 553654-76-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(diphenylamino)phenyl]-2-propenylidene]-
(9CI) (CA INDEX NAME)



L10 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Optical disks and their information recording using multiphoton absorption

AN 2003:196637 CAPLUS

DN 138:229319

TI Optical disks and their information recording using multiphoton absorption

IN Akiba, Masaharu; Kawamata, Jun

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003075961	A2	20030312	JP 2001-268990	20010905
	US 2003162124	A1	20030828	US 2002-233424	20020904
PRAI	JP 2001-268989	A	20010905		
	JP 2001-268990	A	20010905		
	JP 2001-268991	A	20010905		

OS MARPAT 138:229319

AB The optical disks contain comps. represented by general formula
X2(CR4:CR3)mCO(CR1:CR2)nX1 [I; X1, X2 = (un)substituted aryl,
(un)substituted heterocyclic group; R1-R4 = H, substituent; any of R1-R4
may be bonded to each other and form ring; n, m = 1-4 integer], whose
2-photon absorption wavelength can be controlled easily and whose
cross-sectional area of 2-photon absorption are large. Their recording
process employs multiphoton absorption involving 2-photon absorption,
induced by irradiation of laser light of wavelength free from linear
absorption and longer than the linear absorption region of the comps. I.

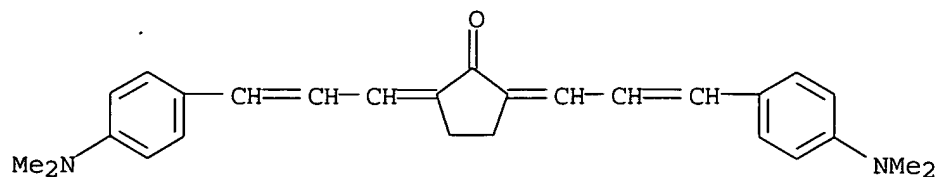
IT 52560-25-5P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)

(optical disks using aldol condensation products of ketones and
aldehydes and their recording using multiphoton absorption)

RN 52560-25-5 CAPLUS

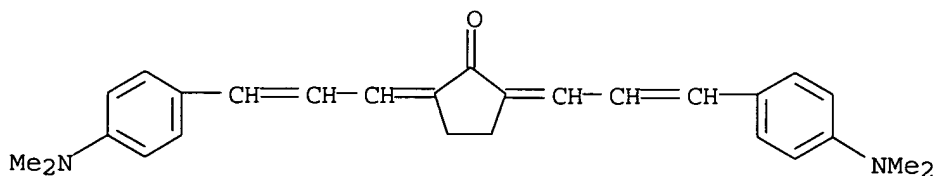
CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-
(9CI) (CA INDEX NAME)



L10 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Two-photon polymerizable compositions and photopolymerization method
 AN 2003:196461 CAPLUS
 DN 138:222341
 TI Two-photon polymerizable compositions and photopolymerization method
 IN Akiba, Masaharu; Kawamata, Jun
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN. CNT 3

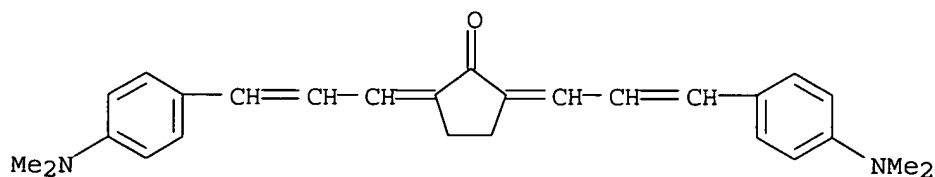
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003073410	A2	20030312	JP 2001-268989	20010905
	US 2003162124	A1	20030828	US 2002-233424	20020904
PRAI	JP 2001-268989	A	20010905		
	JP 2001-268990	A	20010905		
	JP 2001-268991	A	20010905		

AB Title compns. comprise (A) 2-photon-absorbing materials
 X2(CR4:CR3)mC(:O)(CR1:CR2)nX1 [I; X1, X2 = (un)substituted aryl or
 heterocyclic group; R1-R4 = H, substituent; R1-R4 may form ring; m, n =
 1-4] and (B) photopolymerizable monomers or oligomers. The compns. are
 irradiated with linear absorption-free laser light having longer
 wavelength than linear absorption band of I to induce multiphoton
 absorption for photopolymn. The compns. can be cured by laser light
 having various wavelength. Thus, a composition containing a reaction product
 of
 p-(dimethylamino)cinnamic aldehyde and cyclopentanone and SCR 701
 (UV-curable urethane acrylate) was irradiated with 1053-nm laser light to
 give a cured product.
 IT **52560-25-5P**
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (2-photon absorbers; two-photon photopolymerizable compns. curable by
 laser light having various wavelength)
 RN 52560-25-5 CAPLUS
 CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-
 (9CI) (CA INDEX NAME)



L10 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Two-photon induced fluorescence properties of a class of conjugated ketone
 derivatives

AN 2003:147633 CAPLUS
 DN 138:392285
 TI Two-photon induced fluorescence properties of a class of conjugated ketone derivatives
 AU Kawamata, Jun; Akiba, Masaharu; Inagaki, Yoshio
 CS Research Institute for Electronic Science, Hokkaido University, Sapporo, 060-0812, Japan
 SO Japanese Journal of Applied Physics, Part 2: Letters (2003), 42(1A/B), L17-L19
 CODEN: JAPLD8
 PB Japan Society of Applied Physics
 DT Journal
 LA English
 AB The authors have designed bis(cinnamylidene)cycloalkanone derivs. as two-photon absorption (TPA) compds. that possess a much stronger two-photon absorption induced fluorescence (TPF) than common organic dyes when excited with near-IR laser radiation. The TPF intensity of the saturated solution of 2,5-bis(p-dimethylaminocinnamylidene)cyclopentanone (DMACCP) excited using a Q-switched Nd:YAG laser at 1064 nm is 11 times larger than that of the most promising TPF compds. The TPA cross section of the present compds., as estimated by a fluorescence-based technique, varied from 5 + 10-50 cm⁴s/photon for 2,6-bis[3-(9-ethyl)carbazoyl-3-ylidene]cyclohexanone (DMACCH) to 20 + 10-50 cm⁴s/photon for DMACCP at an excitation wavelength of 1064 nm.
 IT 52560-25-5
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (two-photon induced fluorescence properties of a class of conjugated ketone derivs.)
 RN 52560-25-5 CAPLUS
 CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
 TI Photopolymerizable compositions for lithographic printing plates
 AN 1993:437581 CAPLUS
 DN 119:37581
 TI Photopolymerizable compositions for lithographic printing plates
 IN Okamoto, Hiroaki
 PA Okamoto Kagaku Kogyo Kk, Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 05078410	A2	19930330	JP 1991-268302	19910919
PRAI	JP 1991-268302		19910919		
OS	MARPAT 119:37581				
AB	The title compns. comprise radical polymerizable compds. having ≥2				

ethylenically unsatd. double bonds and photoinitiator mixts. containing p-RR1NC6H4(CH:CH)nCH:CR2COCR22:CH(CH:CH)np-C6H4NRR1 [R, R1 = C1-6 alkyl, cycloalkyl, hydroxyalkyl; RR1 may be tetramethylethylene (sic), pentamethylethylene (sic), oxybisethylene; R2, R22 = H, alkyl, Ph; R2R22 may be (CH2)2, (CH2)3, or CO; n = 0-3], PPh3 and/or quaternary phosphonium salts, thiols I (Z = NH, S, O), and tetrazolium derivs. II [R3-5 = alkyl, (un)substituted aryl, styryl, thienyl, trimethylammoniumindolyl; X = Cl, perchloride]. The compns. show high Ar laser sensitivity and are useful as photosensitive layer in presensitized lithog. printing plates.

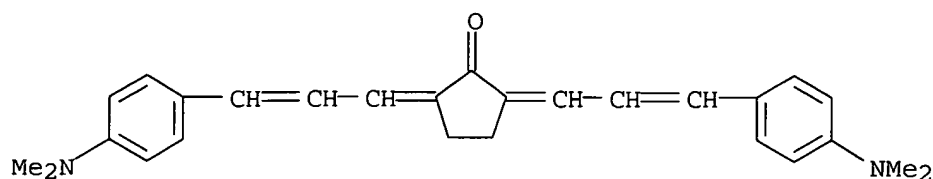
IT 52560-25-5

RL: USES (Uses)

(photoinitiators containing, in photosensitive layers for lithog. printing plates)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



L10 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Photopolymerizable composition

AN 1990:243096 CAPLUS

DN 112:243096

TI Photopolymerizable composition

IN Imahashi, Satoshi; Saito, Atsushi; Yamashita, Katuhiro

PA Toyo Boseki K. K., Japan

SO Ger. Offen., 18 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	DE 3918105	A1	19891214	DE 1989-3918105	19890602
	JP 01304453	A2	19891208	JP 1988-136272	19880602
	JP 2757375	B2	19980525		
	JP 02113250	A2	19900425	JP 1988-266654	19881022
	JP 02157761	A2	19900618	JP 1988-312748	19881210
	US 4987056	A	19910122	US 1989-360831	19890602
PRAI	JP 1988-136272	A	19880602		
	JP 1988-266654	A	19881022		
	JP 1988-312748	A	19881210		

OS MARPAT 112:243096

AB The title composition contains: (1) ≥ 1 ethylenically unsatd. compound which is not a gas at room temperature; (2) ≥ 1 organometallic arene compound; (3) ≥ 1 compound selected from an unsatd. o-aminophenyl ketone, a pyridine derivative or its salts, or a xanthene or thioxanthene compound and their mixts.; and optionally (4) ≥ 1 compound selected from a phenylglycine derivative, a cyclic diketone compound, or their mixts. The composition has high photosensitivity. The material can be used in industrial printing, photoresists, and the like.

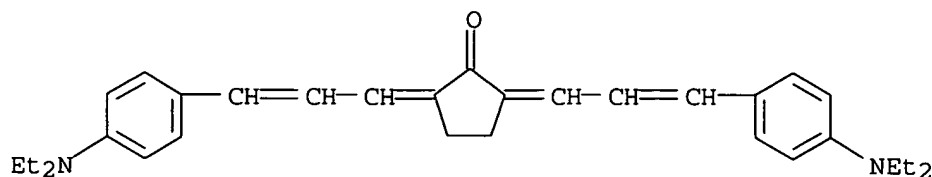
IT 127371-20-4 127371-28-2

RL: USES (Uses)

(photopolymerizable photoimaging composition containing)

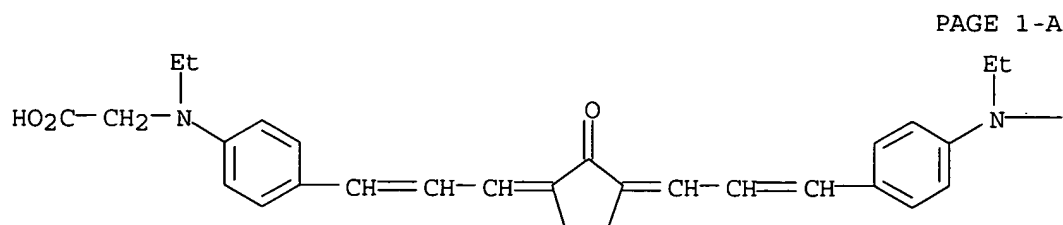
RN 127371-20-4 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(diethylamino)phenyl]-2-propenylidene] - (9CI)
(CA INDEX NAME)



RN 127371-28-2 CAPLUS

CN Glycine, N,N'-[(2-oxo-1,3-cyclopentanediyldiene)bis(1-propen-1-yl-3-ylidene-4,1-phenylene)]bis[N-ethyl- (9CI) (CA INDEX NAME)



PAGE 1-A

PAGE 1-B

—CH₂—CO₂H

L10 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Visible ray-sensitive photopolymerizable vinyl polymer compositions

AN 1990:88367 CAPLUS

DN 112:88367

TI Visible ray-sensitive photopolymerizable vinyl polymer compositions

IN Imahashi, Satoshi; Saito, Atsushi

PA Toyobo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01205153	A2	19890817	JP 1988-29581	19880210
PRAI	JP 1988-29581		19880210		

AB The title composition contains ≥ 1 vinyl compds. nongaseous at room temperature, an organic peroxide group $\text{ArC}(\text{:O})\text{O}_2\text{-}$ (Ar = Ph (substituted with ≥ 1 groups selected from Ph, amino, carbonyl, and halo), Cl-4 alkyl, Cl-4 alkoxy]-containing compound, and p-aminophenyl unsatd. ketone I [R1-2 = H, Cl-5 alkyl; R3 = methylidene, Cl-5 alkylenyldiene forming ring with CO; R4 = C, (substituted) Ph, a group forming indanone or tetralone with R3 and CO; R5 = p-R6R7NC6H4(CH:CH)nCH₂; R6-7 = H, Cl-5 alkyl; m, n = 0, 1]. The composition is useful for a photoresist or a printing plate. Thus, a transparent PET film was coated with a composition of methacrylic acid-Me methacrylate copolymer, tetraethylene glycol diacrylate, 3,3',4,4'-tetra(tert-butylperoxycarbonyl)benzophenone,

2,5-bis(4'-diethylaminobenzylidene)cyclopentanone, MeOH, and EtOAc, dried, coated with aqueous poly(vinyl alc.), dried, neg. pattern-wise irradiated at 490 nm, aqueous Na2CO3-developed, and washed to give a highly-cured pattern.

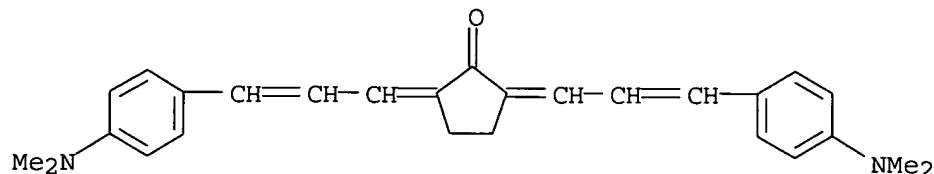
IT 52560-25-5

RL: USES (Uses)

(photoresists from, visible ray-sensitive)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-(9CI) (CA INDEX NAME)



L10 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

TI Photopolymerizable compositions containing cyclic cis- α -dicarbonyl compounds and selected sensitizers

AN 1974:114843 CAPLUS

DN 80:114843

TI Photopolymerizable compositions containing cyclic cis- α -dicarbonyl compounds and selected sensitizers

IN Chang, Catherine T.

PA du Pont de Nemours, E. I., and Co.

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3756827	A	19730904	US 1972-220694	19720125
	DE 2302820	A1	19730830	DE 1973-2302820	19730120
	GB 1415378	A	19751126	GB 1973-3240	19730122
	BE 794482	A1	19730724	BE 1973-126841	19730124
	FR 2169192	A1	19730907	FR 1973-2445	19730124
	JP 48084183	A2	19731108	JP 1973-10004	19730125
	US 28789	E	19760427	US 1975-608673	19750828
PRAI	US 1972-220694	A	19720125		

AB Photopolymerizable compns. of high photospeed consists of an ethylenically unsatd. monomer capable of photoinitiated addition polymerization and photoinitiator

combination of a cyclic cis- α -dicarbonyl compound, such as 2,3-norbornadione (I), 2,2,5,5-tetramethyltetrahydro-3,4-furandione, indole-2,3-dione, and a radiation-absorbing compound having a maximum absorption at <520 nm capable of sensitizing the polymerizing action of the above dicarbonyl compound, such as Michler's ketone (II), 3,3'-diethylthiacyanine p-toluenesulfonate, 4-(dimethylamino)benzoquinone, Acridine Orange, and optionally a free-radical producing H or electron donor compound and a polymeric binder. Thus, a solution containing cellulose acetate 2.7, cellulose acetate butyrate 4.2, trimethylolpropane triacrylate 13.5, Me2CO 116, I 0.047, and II 0.047 g was coated on a poly(ethylene terephthalate) (III) support at 0.002 in. wet thickness, dried, laminated with a III cover sheet, exposed using a 1000-W W-lamp at 44 in. through an Eastman Kodak M-type number 5 step tablet, and developed by dusting with Jungle Black to give an equivalent exposure time of 2 vs. .apprx.400 for a II-free control.

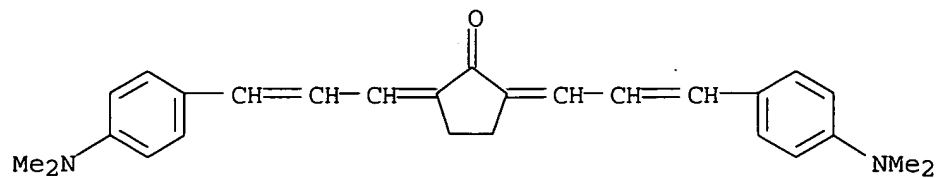
IT 52560-25-5

RL: USES (Uses)

(photosensitizer, for trimethylolpropane triacrylate photopolymerizable compns.)

RN 52560-25-5 CAPLUS

CN Cyclopentanone, 2,5-bis[3-[4-(dimethylamino)phenyl]-2-propenylidene]-
(9CI) (CA INDEX NAME)



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L17 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:705357 CAPLUS
 DN 133:303571
 TI IR-laser sensitive composition for lithographic plate making by direct
 imaging
 IN Nakamura, Ippei
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 32 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000275828	A2	20001006	JP 1999-82401	19990325
	EP 1038668	A2	20000927	EP 2000-105952	20000323
	EP 1038668	A3	20010228		
	EP 1038668	B1	20050525		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6355396	B1	20020312	US 2000-533946	20000323
PRAI	JP 1999-82401	A	19990325		

OS MARPAT 133:303571

AB The invention relates to an IR-laser sensitive composition has an IR absorbing material and a polymer insol. in water and soluble in an alkali solution, wherein the composition shows the high sensitivity and the high development latitude.

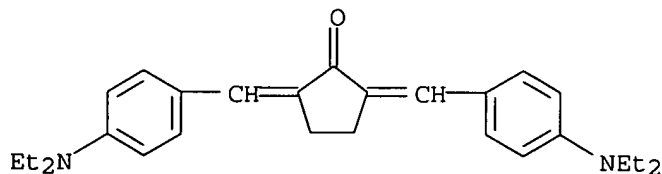
IT **38394-53-5P**, 2,5-Bis[4-(diethylamino)benzylidene]cyclopentanone
301193-31-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(IR absorbing agent in IR-laser sensitive composition)

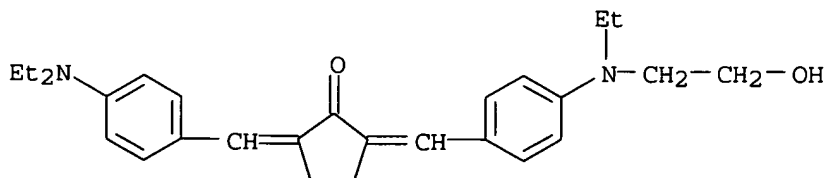
RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2-[[4-(diethylamino)phenyl]methylene]-5-[[4-[ethyl(2-hydroxyethyl)amino]phenyl]methylene]- (9CI) (CA INDEX NAME)



RN 301193-31-7 CAPLUS

CN Cyclopentanone, 2-[[4-(diethylamino)phenyl]methylene]-5-[[4-[ethyl(2-hydroxyethyl)amino]phenyl]methylene]- (9CI) (CA INDEX NAME)



L17 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1991:153838 CAPLUS
 DN 114:153838

TI Improved photopolymers for holographic recording. I. **Imaging**
properties

AU Monroe, Bruce M.; Smothers, William K.; Keys, Dalen E.; Krebs, Robert R.;
Mickish, Daniel J.; Harrington, Albert F.; Schicker, Scott R.; Armstrong,
Mark K.; Chan, Dominic M. T.; Weathers, Carolyn I.

CS Imaging Syst. Dep., E. I. du Pont de Nemours and Co., Inc., Wilmington,
DE, 19880-0352, USA

SO Journal of Imaging Science (1991), 35(1), 19-25
CODEN: JISCEJ; ISSN: 8750-9237

DT Journal

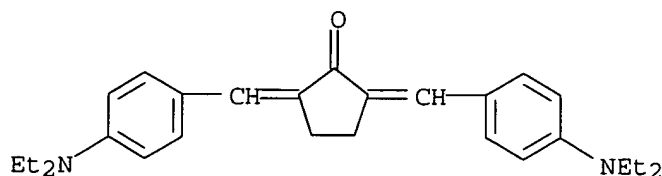
LA English

AB Improved photopolymers for holog. recording are described along with a
brief review of the basic technol. Holog. diffraction gratings with high
refractive index modulation are prepared from photopolymers containing a liquid
aromatic monomer, such as 2-phenoxyethyl acrylate, and an aliphatic binder,
such
as cellulose acetate butyrate. Higher refractive index modulations are
attained when a second, solid, aromatic monomer that contains heavy atoms or
polycyclic aromatic group is used in combination with the liquid aromatic
monomer.
Holog. mirrors with high refractive index modulations are produced from
materials that contain poly(vinyl acetate) or poly(vinyl butyral) binder.
The refractive index modulations of mirrors formed in the poly(vinyl
acetate)- and poly(vinyl butyral)-containing materials can be enhanced by
treatment with an organic solvent or by thermal treatment.

IT **38394-53-5**
RL: USES (Uses)
(photopolymer. mixture containing sensitizer of, for holog.)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA
INDEX NAME)



L17 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:28198 CAPLUS

DN 112:28198

TI Photopolymerizable composition for refractive index **imaging**

IN Monroe, Bruce Malcolm; Smothers, William Karl

PA du Pont de Nemours, E. I., and Co., USA

SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 324480	A2	19890719	EP 1989-100495	19890112
	EP 324480	A3	19890927		
	EP 324480	B1	19940413		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	US 4942112	A	19900717	US 1988-144355	19880115
	BR 8900133	A	19890912	BR 1989-133	19890112
	AT 104451	E	19940415	AT 1989-100495	19890112
	CA 1332796	A1	19941101	CA 1989-588121	19890112

AU 8928480	A1	19890720	AU 1989-28480	19890113
AU 603027	B2	19901101		
JP 02003081	A2	19900108	JP 1989-5068	19890113
JP 06100827	B4	19941212		
CN 1035364	A	19890906	CN 1989-100195	19890114
US 5098803	A	19920324	US 1990-480352	19900214
CN 1067319	A	19921223	CN 1992-101819	19920314
JP 06043634	A2	19940218	JP 1992-342139	19921222
JP 2636653	B2	19970730		
PRAI US 1988-144355	A	19880115		
EP 1989-100495	A	19890112		
CN 1989-100195	A	19890114		

OS MARPAT 112:28198

AB A substantially solid photopolymerizable composition that forms a refractive-index image upon exposure to actinic radiation as the sole processing step comprises 25-75% of a solvent-soluble thermoplastic polymeric binder, 5-60% of a liquid ethylenically unsatd. monomer having a b.p. >100° and being capable of addition polymerization, and 0.1-10% of a photoinitiator system that activated polymerization of the unsatd. monomer upon exposure to actinic radiation. The photopolymerizable composition may also contain a liquid plasticizer selected from tris(2-ethylhexyl)phosphate, glyceryl tributyrates, and compds. having the formula $R_1CO(OC_2H_4)_xO_2CR_2$, $R_1O_2C(CH_2)_yCO_2R_2$, or $R_3(OCH_2CHR_4)_zOH$ ($R_1, R_2 = C_1-10$ alkyl; $R_3 = H$, C_8-16 alkyl; $R_4 = H$, Me ; $x = 1-4$; $y = 2-20$; $z = 1-20$). The photopolymerizable composition thus prepared is useful in preparing optical elements, especially holograms.

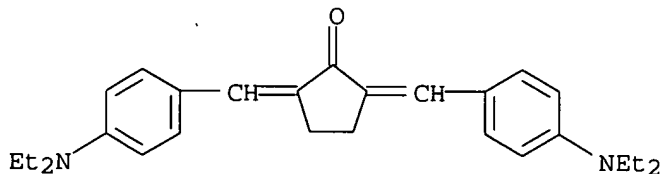
IT 38394-53-5

RL: USES (Uses)

(photopolymerizable compns. containing, for causing refractive index changes upon curing for preparation of optical elements and holograms)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



L17 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1985:496389 CAPLUS

DN 103:96389

TI Photoinsolubilizing resin composition

PA Agency of Industrial Sciences and Technology, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60078443	A2	19850504	JP 1983-186398	19831005
	JP 05065869	B4	19930920		
PRAI	JP 1983-186398		19831005		

AB Resin composition contains ethylenic monomer and a photoinitiator, which is a combination of an unsatd. ketone having the general formula I (R , R_1 , R_4 , $R_5 =$ alkyl; R_2 , $R_3 = H$, or are combined to form C_1-3 alkylene group that is a part of a ring system; $n = 0,1$) with a diaryliodonium salt. The

unsatd. ketone effectively promotes photodecompn. of the iodonium compound, and the use of the photoinitiator provides high sensitivity of the resin composition, especially at longer wavelengths. Thus, 0.01 part of diphenyliodonium

hexafluorophosphate and 0.01 part of bis(p-dimethylaminobenzylidene)acetone were added to 1 part of 10% dioxane solution of a copolymer prepared by introducing methacryloyl group to 1:1 chloromethylstyrene-Me methacrylate copolymer, and the mixture was coated on an anodized Al plate. Photosensitivity to Xe lamp radiation was 32 times higher than that of com. products.

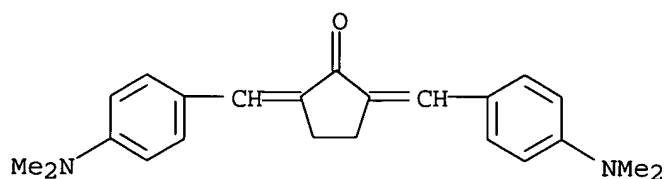
IT 19226-99-4

RL: USES (Uses)

(photoimaging resin composition containing)

RN 19226-99-4 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(dimethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



L17 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:482722 CAPLUS

DN 97:82722

TI Composition for priming photopolymerization containing N-oxy-N-heterocyclic compounds as activators

IN Specht, Donald Paul; Farid, Samir Yacoub

PA Eastman Kodak Co., USA

SO Fr. Demande, 22 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2489982	A1	19820312	FR 1981-17068	19810909
	FR 2489982	B1	19860221		
	CA 1216998	A1	19870120	CA 1981-376470	19810429
	DE 3135399	A1	19820722	DE 1981-3135399	19810907
	GB 2083832	A	19820331	GB 1981-27386	19810910
	GB 2083832	B2	19840725		
	JP 57083501	A2	19820525	JP 1981-143148	19810910
PRAI	US 1980-185854	A	19800910		

AB For the priming of the addition photopolymerization of acrylic monomers a combination of a photosensitizer with an amino group, such as an amino-3-oxocoumarin derivative, 0.005-0.015 mmol/g solids, with 10 times as much of an activator, 0.05-0.2 mmol, such as an N-alkoxy-pyridinium salt or N-benzoyloxypthalimide, is used. In the presence of the photoexcited sensitizer the activator liberates free radicals. The polymerizable compound forms 5-100% of the compound-binder mixture, used preferably as a 20-120µ single-phase layer on a film, paper, metal, or ceramic support. Thus, a solution was prepared containing pentaerythritol tetraacrylate 45, pentaerythritol tetramethacrylate 60, Acryloid B-48-N (binder) 120, Acryloid A-111 (binder) 120, di-Bu phthalate (plasticizer) 50.4, and tert-butyl-4-hydroxy-5-methylphenyl sulfide (stabilizer) 1.05 g in CH₂Cl₂ 535.2 g. To 13 mL of this solution 0.08 mmol of 3-benzoyl-7-diethylaminocoumarin was added together with 0.8 mmol of

N-phenylglycine(I) and of N-methoxy-4-phenylpyridinium tetrafluoroborate(II). The solns. were coated as 300 μ layers (wet) on a Cu support at 18° and dried stepwise. A sensitometric exposure and development with MeCCl₃ revealed a relative sensitivity of 2.8 for I and 2.0 for II.

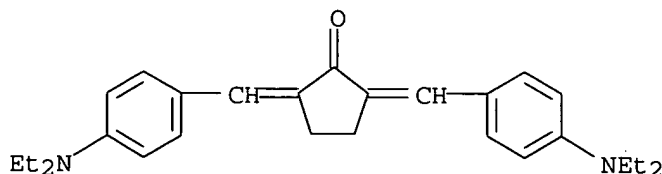
IT 38394-53-5

RL: USES (Uses)

(photosensitizer, in combination with activator for addition photopolymerization of acrylic monomer-containing layers)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



L17 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:60893 CAPLUS

DN 96:60893

TI Optical recording product containing an $\alpha\alpha'$ -bis(dialkylaminobenzylidene) ketone dye

IN Specht, Donald Paul; Thomas, Harold Todd

PA Eastman Kodak Co., USA

SO Fr. Demande, 10 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2476546	A1	19810828	FR 1981-3586	19810224
	FR 2476546	B1	19830617		
	CA 1154963	A1	19831011	CA 1981-369312	19810126
	DE 3106878	A1	19820107	DE 1981-3106878	19810224
	DE 3106878	C2	19870709		
	BE 887677	A1	19810825	BE 1981-203921	19810225
	JP 56135557	A2	19811023	JP 1981-26694	19810225
	JP 01055120	B4	19891122		
PRAI	US 1980-124382	A	19800225		

AB A product for video disk recording using a high energy beam of 488 nm comprises a reflective support and an amorphous layer containing a binder, such as cellulose nitrate, and the colorant I (R = C1-6 alkyl and n = 0-5). Thus, 2,5-bis(4-diethylaminobenzylidene)cyclopentanone was prepared and dissolved (1 g) in cyclohexanone 60 g contg cellulose nitrate 1 g, and this composition was coated on a reflective support and dried to give a recording layer.

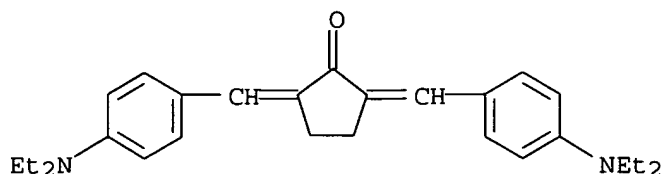
IT 38394-53-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, as colorant in video disk recording material)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



L17 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:456664 CAPLUS

DN 81:56664

TI Photopolymerizable compositions capable of yielding reverse images

IN Lee, Shung-Yan

PA du Pont de Nemours, E. I., and Co.

SO U.S., 8 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3782951	A	19740101	US 1972-276381	19720731
	DE 2338223	A1	19740221	DE 1973-2338223	19730727
	BE 803047	A1	19740131	BE 1973-134085	19730731
	JP 49054018	A2	19740525	JP 1973-86272	19730731
	JP 56024940	B4	19810609		
	US 3888672	A	19750610	US 1973-394262	19730904
PRAI	US 1972-276381	A	19720731		

AB Pos.-working photopolymerizable compns. for use in preparing relief or planog. printing plates, direct copying films, or the like are composed of an unsatd. monomer, such as polyethylene glycol dimethacrylate (I) 30-70; a hexaarylbiimidazole, such as 2,2'-bis(o-chlorophenyl)-4,4',5,5'-tetrakis(m-methoxyphenyl)biimidazole (II) 49; a H- or a electron donor compound, such as Rhodanine (III) <0.4; and a polymeric binder, such as poly(methyl methacrylate) (IV) 53-58% by weight. The compns. are capable of yielding reverse photopolymer images since relatively intense radiation prevents polymerization, while less intense radiation yields photopolymn.

Thus, a composition containing trichloroethylene 10.8, I 1.2, II 0.1, III 0.01, IV 1.2,

2,5-bis(p-diethylaminobenzylidene)cyclopentanone 0.001 g, and MeOH 1 ml was coated on a poly(ethylene terephthalate) support, air dried for 30 min, a poly(ethylene terephthalate) film placed on the tacky surface, the element exposed through a $\sqrt{2}$ step tablet for 2.5 min to a W-I light at 54 in., the cover sheet removed, and the surface dusted with toner; steps 1-2 accepted toner; steps 3-5 rejected toner; steps 6-21 accepted toner.

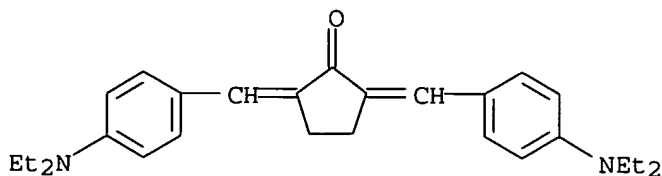
IT **38394-53-5**

RL: USES (Uses)

(photopolymerizable compns. containing, for planog. or relief printing plates)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



L17 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:114843 CAPLUS

DN 80:114843

TI Photopolymerizable compositions containing cyclic cis- α -dicarbonyl compounds and selected sensitizers

IN Chang, Catherine T.

PA du Pont de Nemours, E. I., and Co.

SO U.S., 7 pp.

CODEN: USXXAM

DT Patent

LA English

FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3756827	A	19730904	US 1972-220694	19720125
	DE 2302820	A1	19730830	DE 1973-2302820	19730120
	GB 1415378	A	19751126	GB 1973-3240	19730122
	BE 794482	A1	19730724	BE 1973-126841	19730124
	FR 2169192	A1	19730907	FR 1973-2445	19730124
	JP 48084183	A2	19731108	JP 1973-10004	19730125
	US 28789	E	19760427	US 1975-608673	19750828
PRAI	US 1972-220694	A	19720125		

AB Photopolymerizable compns. of high photospeed consists of an ethylenically unsatd. monomer capable of photoinitiated addition polymerization and photoinitiator

combination of a cyclic cis- α -dicarbonyl compound, such as 2,3-norbornadione (I), 2,2,5,5-tetramethyltetrahydro-3,4-furandione, indole-2,3-dione, and a radiation-absorbing compound having a maximum absorption at <520 nm capable of sensitizing the polymerizing action of the above dicarbonyl compound, such as Michler's ketone (II), 3,3'-diethylthiacyanine p-toluenesulfonate, 4-(dimethylamino)benzoquinone, Acridine Orange, and optionally a free-radical producing H or electron donor compound and a polymeric binder. Thus, a solution containing cellulose acetate 2.7, cellulose acetate butyrate 4.2, trimethylolpropane triacrylate 13.5, Me₂CO 116, I 0.047, and II 0.047 g was coated on a poly(ethylene terephthalate) (III) support at 0.002 in. wet thickness, dried, laminated with a III cover sheet, exposed using a 1000-W W-lamp at 44 in. through an Eastman Kodak M-type number 5 step tablet, and developed by dusting with Jungle Black to give an equivalent exposure time of 2 vs. .apprx.400 for a II-free control.

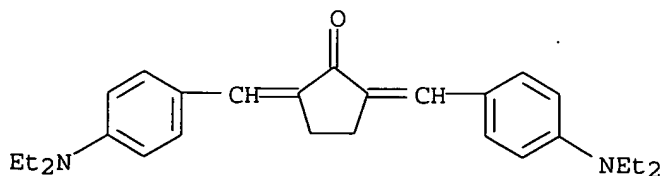
IT 38394-53-5

RL: USES (Uses)

(photosensitizer, for trimethylolpropane triacrylate photopolymerizable compns.)

RN 38394-53-5 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(diethylamino)phenyl]methylene] - (9CI) (CA INDEX NAME)



=>

L22 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1990:100741 CAPLUS

DN 112:100741

TI Photopolymerization initiator and thermal-transfer recording medium

IN Okuma, Norio

PA Canon K. K., Japan; Sanyo Chemical Industries Ltd.

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 01174502	A2	19890711	JP 1987-335731	19871228
PRAI	JP 1987-335731		19871228		

AB The photopolymn. initiator is composed of I or II [Ar1, Ar2 = aromatic ring, heterocyclic ring; R1 = H, C1-10 alkyl, alkenyl, alkoxy, or alkylthio, C6-12 aryl, aryloxy, or heterocyclic ring with number of C and non-C atoms to be 5-15; X = non-metallic atom for forming a ring], and III [Y = halogen; R = alkyl, aryl, alkenyl; Q = CY3, NH2, etc.]. The thermal-transfer recording layer is composed of the photoinitiator, and monomer, oligomer, or polymer with unsatd. double bond or these mixture An image-forming material may be encapsulated. This initiator is especially useful in one-shot color recording.

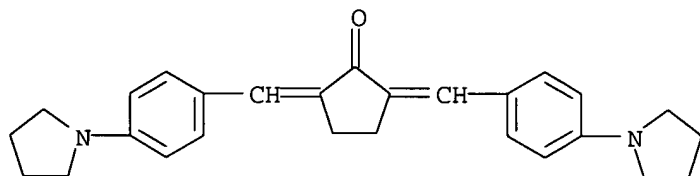
IT 125407-16-1

RL: USES (Uses)

(photopolymn. initiator composition containing triazine derivative and)

RN 125407-16-1 CAPLUS

CN Cyclopentanone, 2,5-bis[[4-(1-pyrrolidiny)phenyl]methylene]- (9CI) (CA INDEX NAME)



(FILE 'HOME' ENTERED AT 23:20:23 ON 10 JUN 2005)

FILE 'REGISTRY' ENTERED AT 23:20:30 ON 10 JUN 2005

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 STRUCTURE UPLOADED
L5 44 SEA SSS FUL L1
L6 5 SEA SSS FUL L2
L7 0 SEA SSS FUL L3
L8 1 SEA SSS FUL L4
 D L8

FILE 'CAPLUS' ENTERED AT 23:22:24 ON 10 JUN 2005

L9 106 SEA L5
L10 14 SEA L6
L11 4 SEA L8
 D L11 BIB AB HITSTR
 D L11 1-4 BIB AB HITSTR
 D L10 1-14 TI BIB
 D L10 1-14 TI BIB AB HITSTR
L12 26980 SEA 3-D OR 3 D
L13 0 SEA L9 AND L12
L14 87246 SEA THREE DIMENSIONAL
L15 0 SEA L14 AND L9
L16 156072 SEA IMAGING
L17 8 SEA L9 AND L16
 D 1-8 BIB AB HITSTR
 D L9 1-25 TI

FILE 'REGISTRY' ENTERED AT 23:31:26 ON 10 JUN 2005

L18 STRUCTURE UPLOADED
L19 STRUCTURE UPLOADED
L20 1 SEA SSS FUL L18
L21 0 SEA SSS FUL L19
 D L20

FILE 'CAPLUS' ENTERED AT 23:32:50 ON 10 JUN 2005

L22 1 SEA L20
 D BIB AB HITSTR